
WARNING

EXHAUST GASES CAN KILL

Brain damage or death can result from heavy exposure. Precautions must be followed to ensure crew safety when the personnel heater or engine of any vehicle is operated for any purpose.

1. Do not operate your vehicle engine in enclosed areas.
2. Do not idle vehicle engine with vehicle windows closed.
3. Be alert at all times for exhaust odors.
4. Be alert for exhaust poisoning symptoms. They are:
 - Headache
 - Dizziness
 - Sleepiness
 - Loss of muscular control
5. If you see another person with exhaust poisoning symptoms:
 - Remove person from area
 - Expose to open air
 - Keep person warm
 - Do not permit physical exercise
 - Administer artificial respiration, if necessary*
 - Notify a medic
 - For artificial respiration, refer to FM 21-11.
6. BE AWARE, the field protective mask and ambulance Nuclear-Biological-Chemical (NBC) system will not protect you from exhaust poisoning.

THE BEST DEFENSE AGAINST EXHAUST POISONING IS ADEQUATE VENTILATION.

warning a

WARNING SUMMARY

- Never open one end of cargo shell door without first ensuring that the opposite end is securely closed. Not doing so may cause both ends to open at the same time, causing damage to equipment, mission abort, or injury to personnel.
- Drycleaning solvent is flammable and will not be used near an open flame. A fire extinguisher will be kept nearby when the solvent is used. Use only in well-ventilated places. Failure to do this may result in injury to personnel and/or damage to equipment.
- Protective gloves, clothing, and/or respiratory equipment must be worn whenever caustic, toxic, or flammable cleaning solutions are used. Failure to do this may result in injury to personnel and/or damage to equipment.
- Do not perform fuel or battery system checks, inspections, or maintenance while smoking or near sparks. Fuel may ignite and batteries may explode causing damage to vehicle and injury or death to personnel.
- The automatic transmissions on M998 and "A1" vehicles do not have a "PARK" position. Whenever the vehicle is parked, or the transmission is in "NEUTRAL," the parking brake **MUST BE APPLIED**. Damage to equipment and injury to personnel may occur if these instructions are not followed.
- • The automatic transmissions on M1123 and "A2" vehicles have a "PARK" position. Never use the transmission shift lever in place of the parking brake. Set the parking brake. Ensure the transmission shift lever is in the "P" (park) position and transfer case shift lever is NOT in the "N" (neutral) position. Damage to equipment and injury to personnel may occur if these instructions are not followed.
- Ensure all slack from two-point seatbelt adjusting strap or three-point seatbelt is removed. Two-point seatbelt retracts but does not lock in any position. Three-point seatbelt retracts and will lock only during sudden stops or impact. Injury to personnel will result if an accident occurs and seatbelts are not in use or adjusted properly.
- • Extreme caution shall be taken when transporting personnel. Rollover protection and seatbelts are available for the crew area only and are not provided in the troop/cargo area. Despite certain design characteristics of the vehicle, such as improved capabilities, failure to use basic safe driving skills may result in injury or death to personnel and damage to equipment.
- Operators are reminded to observe basic safe driving techniques/skills when operating vehicle. Vehicle speed must be reduced consistent with weather and road/terrain conditions. Obstacles such as stumps and boulders must be avoided.
- This vehicle has been designed to operate safely and efficiently within the limits specified in this TM. Operations beyond these limits are prohibited IAW AR 750-1 without written approval from the Commander, U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-CM-S, Warren, MI 48397-5000.
- • Prior to towing vehicle with rear wheels up, secure steering wheel to prevent front wheels from turning.
- Wear leather gloves when handling winch cable. Do not handle cable with bare hands. When fully extending winch cable, ensure that four wraps of winch cable remain on drum at all times. Direct all personnel to stand clear of winch cable during winch operation. Failure to do this may cause damage to vehicle and injury or death to personnel.

WARNING SUMMARY (Cont'd)

- Avoid using fire extinguisher in unventilated areas. Prolonged inhalation exposure to extinguishing agent or fumes from burning material may cause injury to personnel. Using fire extinguisher in windy area will cause rapid dispersal of extinguishing agent and reduce effectiveness in fire control.
- Vehicle operation in snow is a hazardous condition. Operator must travel at reduced speeds and be prepared to meet sudden changes in road conditions. Pump brakes gradually when stopping vehicle on ice or snow. Sudden braking will cause wheels to lock and vehicle to slide out of control causing damage to vehicle and injury or death to personnel.
- Do not rely on wet service brakes. Keep applying brakes until they dry out and uneven braking ceases. Failure to do this may cause damage to vehicle and injury or death to personnel.
- Exhaust components are hot after prolonged vehicle use. Ensure exhaust system components are cool before removing/installing exhaust assembly. Failure to do this will result in injury to personnel.
- Do not use the hand throttle as an automatic speed or cruise control. The hand throttle does not automatically disengage when brake is applied, resulting in increased stopping distances and possible hazardous and unsafe operation. Injury to personnel or damage to equipment may result.
- Do not operate heater when ventilation system is on. Damage to heater or injury to personnel will result.
- To ensure opening of the hood assembly is accomplished safely and effectively, always maintain the proper lifting posture, legs bent with back straight. When raising and securing hood, make sure the hood prop rod is secured to hood support bracket. When releasing hood prop rod, do not pull rod at hook end. Damage to equipment or injury to personnel will occur if hood is not raised, secured, and lowered properly.
- If NBC exposure is suspected, all air filter media should be handled by personnel wearing protective equipment. Consult your unit NBC officer or NBC NCO for appropriate handling or disposal instructions.
- Radial and bias ply tires should not be mixed on the same vehicle. Injury to personnel or damage to equipment may result.
- Do not use bias ply tires on the M1097, M1123, or any A1 and A2 models, under any condition. Due to tire load ratings and vehicle load carrying capabilities, only the load range "D" radial tire can be used on the M1097, M1123, and all A1 and A2 models. ■
- For M1097, M1123, and all A1 and A2 model vehicles only, hearing protection is required for driver and passengers when engine is running. Noise levels produced by these vehicles exceed 85 dBA, which may cause injury to personnel. ■
- The Department of Transportation requires 105 mm cannon ammunition to be in wooden boxes when transporting ammunition on public highways. Movement of cannon ammunition in fiber containers (inner pack) in the vehicle ammunition rack is restricted to other than public highways.
- Do not operate the vehicle without the windshield assembly positioned upright and the "B" pillar securely attached. Operation of the vehicle without these structures in place may result in injury to personnel and damage to equipment.

WARNING SUMMARY (Cont'd)

- Communication shelters AN/GRC-122 and AN/GRC-142 RATT may overload vehicle by up to 500 pounds. Use caution when driving to avoid damage to equipment or injury to personnel.
- Chock blocks shall be used when parking a vehicle with inoperative parking brakes, when operating in extreme cold conditions, when parking on inclines, or whenever and wherever maintenance is being performed. Failure to do so may result in injury to personnel or damage to equipment.
- Vehicle speed must be reduced consistent with weather and road/terrain conditions. Obstacles such as stumps and boulders must be avoided. Failure to use basic safe driving techniques/skills may result in injury or death to personnel and damage to equipment.
- Do not use tow pintle as a step when entering or exiting vehicle cargo area. Failure to do so may result in injury to personnel or damage to equipment.

LIST OF EFFECTIVE PAGES

NOTE: The portion of the text affected by the changes is indicated by a vertical line in the outer margins of the page.

Dates of issue for original and changed pages are:

Original 0 31 January 1996

Change 1 31 May 1999

Change 2 30 November 2001

TOTAL NUMBER OF PAGES IN THIS PUBLICATION IS 398
CONSISTING OF THE FOLLOWING:

| Page No. . . *Change No. | Page No. . . *Change No. | Page No. . . *Change No. |
|--------------------------|-----------------------------|-----------------------------|
| Warning a 0 | 2-80 1 | 2-157 - 2-165 0 |
| Warning b - d 1 | 2-81 - 2-82 0 | 2-166 - 2-167 1 |
| A - B 2 | 2-83 - 2-87 1 | 2-168 - 2-171 0 |
| i 1 | 2-88 - 2-89 0 | 2-172 1 |
| ii 0 | 2-90 - 2-104 1 | 2-173 - 2-179 0 |
| 1-1 - 1-3 1 | 2-104.1 - 2-104.3 Added . 1 | 2-180 1 |
| 1-4 - 1-5 0 | 2-104.4 Blank 1 | 2-181 - 2-182 0 |
| 1-6 - 1-9 1 | 2-105 - 2-106 1 | 2-182.1 - 2-182.2 Added . 1 |
| 1-10 - 1-21 0 | 2-107 0 | 2-183 - 2-184 1 |
| 1-22 - 1-24 1 | 2-108 - 2-112 1 | 2-185 - 2-217 0 |
| 1-25 - 1-29 0 | 2-113 - 2-120 0 | 218 Blank 0 |
| 1-30 - 1-34 1 | 2-121 1 | 3-1 - 3-2 0 |
| 2-1 - 2-3 0 | 2-122 - 2-124 0 | 3-3 1 |
| 2-4 1 | 2-124.1 - 2-124.2 Added . 1 | 3-4 0 |
| 2-5 0 | 2-125 1 | 3-5 1 |
| 2-6 - 2-7 1 | 2-126 2 | 3-6 - 3-9 0 |
| 2-8 - 2-25 0 | 2-127 - 2-132 0 | 3-10 - 3-11 1 |
| 2-26 - 2-27 1 | 2-132.1 Added 2 | 3-12 - 3-15 0 |
| 2-28 - 2-31 0 | 2-132.2 Added 2 | 3-16 1 |
| 2-32 - 2-33 1 | 2-133 Blank 2 | 3-17 0 |
| 2-34 - 2-41 0 | 2-134 1 | 3-18 - 3-21 1 |
| 2-42 1 | 2-134.1 - 2-134.4 Added . 1 | 3-22 0 |
| 2-43 0 | 2-135 1 | 3-23 1 |
| 2-44 - 2-45 1 | 2-136 0 | 3-24 - 3-26 0 |
| 2-46 - 2-60 0 | 2-137 1 | 3-27 - 3-28 1 |
| 2-61 - 2-62 1 | 2-138 0 | 3-28.1 - 3-28.2 Added . . 1 |
| 2-63 - 2-65 0 | 2-139 - 2-144 1 | 3-29 1 |
| 2-66 1 | 2-145 0 | 3-30 - 3-31 0 |
| 2-67 0 | 2-146 1 | 3-32 - 3-33 1 |
| 2-68 - 2-70 1 | 2-147 - 2-151 0 | 3-34 - 3-38 0 |
| 2-71 0 | 2-152 1 | 3-39 - 3-40 1 |
| 2-72 - 2-76 1 | 2-153 0 | A-1 - A-2 1 |
| 2-77 0 | 2-154 1 | B-1 0 |
| 2-78 1 | 2-155 0 | B-2 2 |
| 2-79 0 | 2-156 1 | B-3 - B-4 1 |

*Zero in this column indicates original page.

Change 2 A

LIST OF EFFECTIVE PAGES (Contd)

| Page No. . . *Change No. | Page No. . . *Change No. | Page No. . . *Change No. |
|--------------------------------|--------------------------|------------------------------|
| B-4.1 - B-4.2 Added1 | E-111 | G-2 - G-51 |
| B-5 - B-101 | E-120 | G-60 |
| C-1 - C-41 | F-1 - F-51 | G-7 - G-81 |
| D-10 | F-6 - F-70 | G-9 - G-130 |
| D-2 - D-61 | F-8 - F-171 | G-14 - G-161 |
| E-1 - E-21 | F-18 - F-210 | Index-1 - Index-51 |
| E-3 - E-60 | F-22 - F-231 | Index 62 |
| E-7 - E-81 | F-24 Blank0 | Index 71 |
| E-9 - E-100 | G-10 | Index 8 Blank0 |

*Zero in this column indicates original page.

***ARMY TM 9-2320-280-10
AIR FORCE TO 36A12-1A-2091-1
MARINE CORPS TM 2320-10/6B**

**TECHNICAL MANUAL
NO. 9-2320-280-10
NO. 2320-10/6B**

**HEADQUARTERS,
DEPARTMENTS OF THE ARMY,
THE AIR FORCE, AND MARINE CORPS
WASHINGTON, D.C. 31 JANUARY 1996**

**TECHNICAL ORDER
NO. 36A12-1A-2091-1**

OPERATOR'S MANUAL

TRUCK, UTILITY: CARGO/TROOP CARRIER, 1-1/4 TON, 4X4, M998
(2320-01-107-7155) (EIC: BBD); M998A1 (2320-01-371-9577) (EIC: BBN);
TRUCK, UTILITY: CARGO/TROOP CARRIER, 1-1/4 TON, 4X4, W/WINCH, M1038 (2320-01-107-7156)
(EIC: BBE); M1038A1 (2320-01-371-9578) (EIC: BBP);
TRUCK, UTILITY: HEAVY VARIANT, 4X4, M1097 (2320-01-346-9317) (EIC: BBM); M1097A1
(2320-01-371-9583) (EIC: BBU); M1097A2 (2320-01-380-8604) (EIC: BB6); M1123 (2320-01-455-9593) (EICB6G);
TRUCK, UTILITY: TOW CARRIER, ARMORED, 1-1/4 TON, 4X4,
M966 (2320-01-107-7153) (EIC: BBC); M966A1 (2320-01-372-3932) (EIC: BBX);
M1121 (2320-01-456-1282) (EICB6H);
TRUCK, UTILITY: TOW CARRIER, ARMORED, 1-1/4 TON, 4X4, W/WINCH,
M1036 (2320-01-107-7154) (EIC: BBH);
TRUCK, UTILITY: TOW CARRIER, W/SUPPLEMENTAL ARMOR, 1-1/4 TON, 4X4,
M1045 (2320-01-146-7191); M1045A1 (2320-01-371-9580) (EIC: BBR); M1045A2 (2320-01-380-8229) (EIC: BB5);
TRUCK, UTILITY: TOW CARRIER, W/SUPPLEMENTAL ARMOR, 1-1/4 TON, 4X4, W/WINCH, M1046
(2320-01-146-7188); M1046A1 (2320-01-371-9582) (EIC: BBT);
TRUCK, UTILITY: ARMAMENT CARRIER, ARMORED, 1-1/4 TON, 4X4, M1025
(2320-01-128-9551) (EIC: BBF); M1025A1 (2320-01-371-9584) (EIC: BBV);
M1025A2 (2320-01-380-8233) (EIC: BB3);
TRUCK, UTILITY: ARMAMENT CARRIER, ARMORED, 1-1/4 TON, 4X4, W/WINCH, M1026
(2320-01-128-9552) (EIC: BBG); M1026A1 (2320-01-371-9579) (EIC: BBQ);
TRUCK, UTILITY: ARMAMENT CARRIER, W/SUPPLEMENTAL ARMOR, 1-1/4 TON, 4X4, M1043
(2320-01-146-7190); M1043A1 (2320-01-372-3933) (EIC: BBY);
M1043A2 (2320-01-380-8213) (EIC: BB4);
TRUCK, UTILITY: ARMAMENT CARRIER, W/SUPPLEMENTAL ARMOR, 1-1/4 TON, 4X4, W/WINCH,
M1044 (2320-01-146-7189); M1044A1 (2320-01-371-9581) (EIC: BBS);
TRUCK, UTILITY: S250 SHELTER CARRIER, 4X4, M1037 (2320-01-146-7193) (EIC: BBK);
TRUCK, UTILITY: S250 SHELTER CARRIER, 4X4, W/WINCH, M1042 (2320-01-146-7187);
TRUCK, AMBULANCE, 2-LITTER, ARMORED, 4X4, M996 (2310-01-111-2275)
(EIC: BBB); M996A1 (2310-01-372-3935) (EIC: BB2);
TRUCK, AMBULANCE, 4-LITTER, ARMORED, 4X4, M997 (2310-01-111-2274) (EIC: BBA);
M997A1 (2310-01-372-3934) (EIC: BB2); M997A2 (2310-01-380-8225) (EIC: BB8);
TRUCK, AMBULANCE, 2-LITTER, SOFT TOP, 4X4, M1035 (2310-01-146-7194);
M1035A1 (2310-01-371-9585) (EIC: BBW); M1035A2 (2310-01-380-8290) (EIC: BB9).

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*This publication supersedes TM 9-2320-280-10 dated 18 JUNE 1991 and all changes.